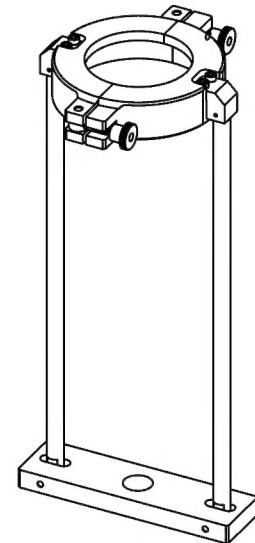
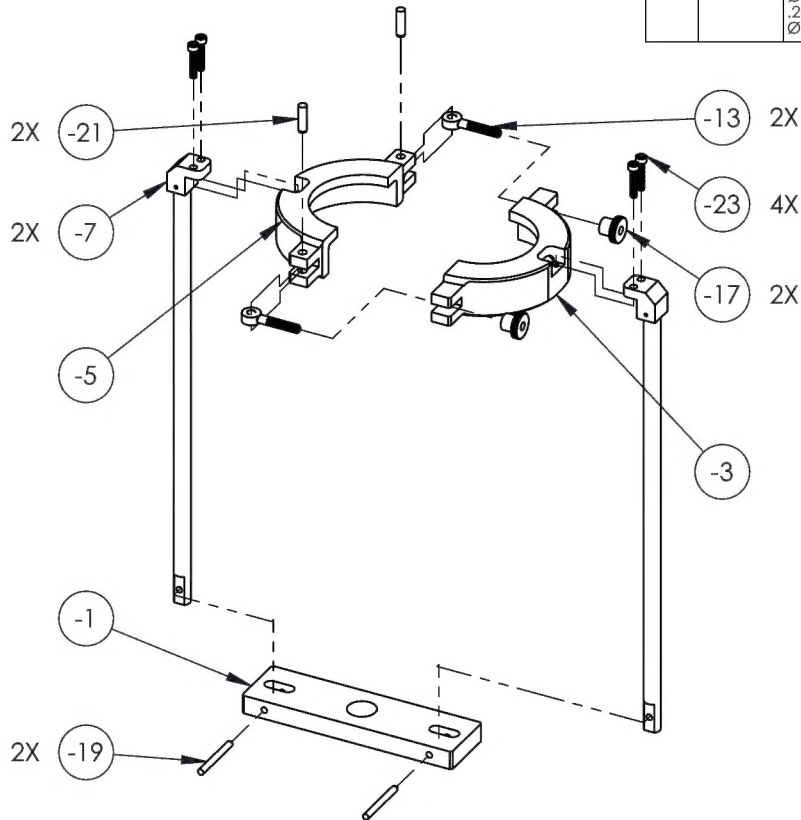


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	ADDED NOTE 1 SHEET 1. -1, -3, -5, -7 ADDED FINISH QMSI-6.2.2, B.O. REV D. -1, -7 CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR. -1 CH'D DIM WAS 2X Ø .2362/.2358 THRU ALL IS 2X Ø.2382/.2375 (S.F. -19), WAS 8.650 IS 8.65, WAS 2.360 IS 2.36, WAS .750 IS .75. -3, -5 CH'D MATERIAL WAS 4140 IS 4140/4142, ADDED HEAT TREAT RC 28-34. -3 CH'D DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .91, ADDED ENGRAVE NOTE. -5 CH'D DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .453 ±.010, 2X .91, ADDED ENGRAVE NOTE. -7 CH'D DWG. TO SHEET METAL TOLERANCE. -9 CH'D DIM WAS .129/.125 IS Ø.129/.125 (P.F. -15), WAS Ø.625 +.005/.000 Ψ .510 IS Ø.625 +.005/.000 Ψ .51 (S.F. -11), WAS .240 IS 2X .240, DELETED DIM .395. -11 CH'D DIM WAS Ø(.625) IS Ø.63, WAS 1.200 IS 1.20, WAS .600 IS .60, WAS Ø.2391/.2379 THRU ALL IS Ø.2362/.2357 THRU ALL (P.F. -19), ADDED DIM .56 Ø.620/.615 (S.F. -9).	11/14/2016	RJC	SM



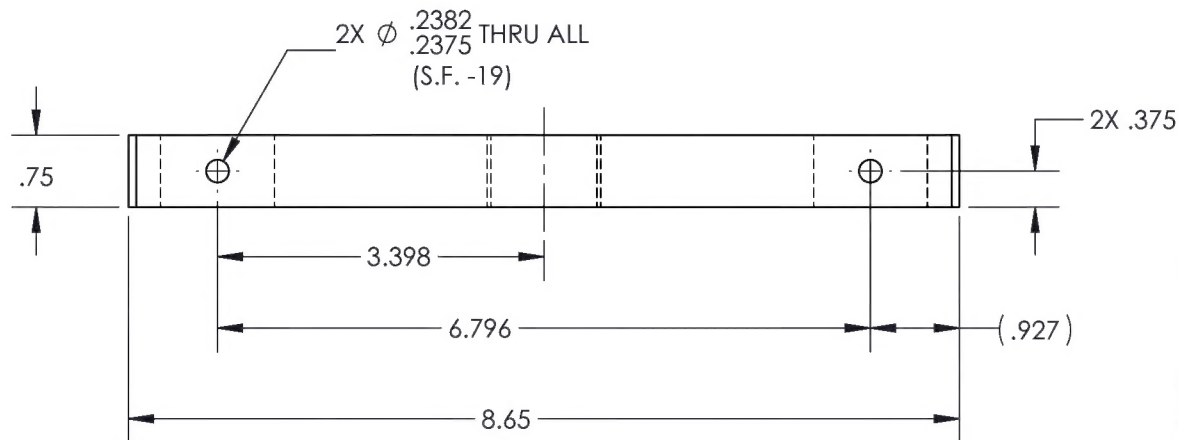
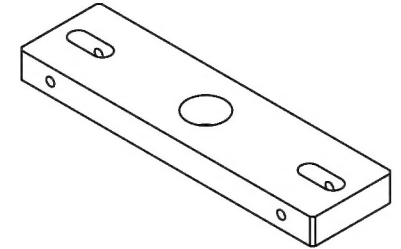
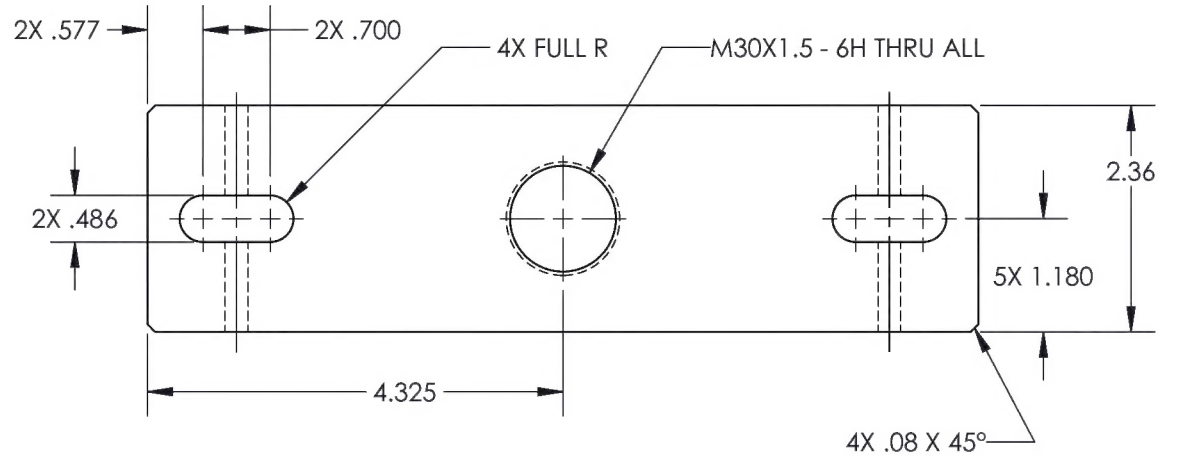
UNDER REVIEW
URF 19-953 19.10.24 (VM)

- NOTES:
1. REF. EUROCOPTER T/N 1X53 166 817.
2. USED IN KIT RBEA62316

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.	 PULLER		
			-1	1	BASE PLATE	A36/1018/1020 HR		2			
			-3	1	RING	4140/4142		3	RBE1X53-166-817		
			-5	1	RING 2	4140/4142		4			
	X		-7	2	WELDMENT			5	REV 2		
	1		-9		ROD TOP	A36/1018/1020 HR		6			
	1		-11		ROD	1018/1020 CR		7	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125° ✓		
		B/O	-13	2	ROD END	STEEL	M8 x 1.25 X 50mm (MCMaster-CARR #3799K13)	1			
		B/O	-15	2	SPRING PIN	STEEL	Ø1/8 X 7/8 (MCMaster-CARR #90692A699)	5	SPEC 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
		B/O	-17	2	KNOB	STEEL	M8 x 1.25 (MCMaster-CARR #60765K343)	1			
		B/O	-19	2	DOWEL PIN	STEEL	6mm X 60mm (MCMaster-CARR #91595A485)	1	DRAWN BY: GILBERT CHECKED: DUERFELDT OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: MACKOVJAK		
		B/O	-21	2	DOWEL PIN	STEEL	8mm X 30 mm (MCMaster-CARR #91595A567)	1			
		B/O	-23	4	SCREW	STEEL	M6 X 1 X 30mm SHCS (MCMaster-CARR #91290A332)	1	USED ON MODEL EC135		
	ASSY -7										
									SCALE 1:7 DATE 6/18/2012 SHEET 1 OF 7		

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-1 CH'D DIM WAS 2X Ø .2362/.2358 THRU ALL IS 2X Ø.2382/.2375 (S.F. -19), WAS 8.650 IS 8.65, WAS 2.360 IS 2.36, WAS .750 IS .75, CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, ADDED FINISH QMSI-6.2.2, B.O. REV D.	11/14/2016	RJC	SM



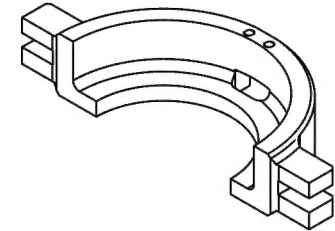
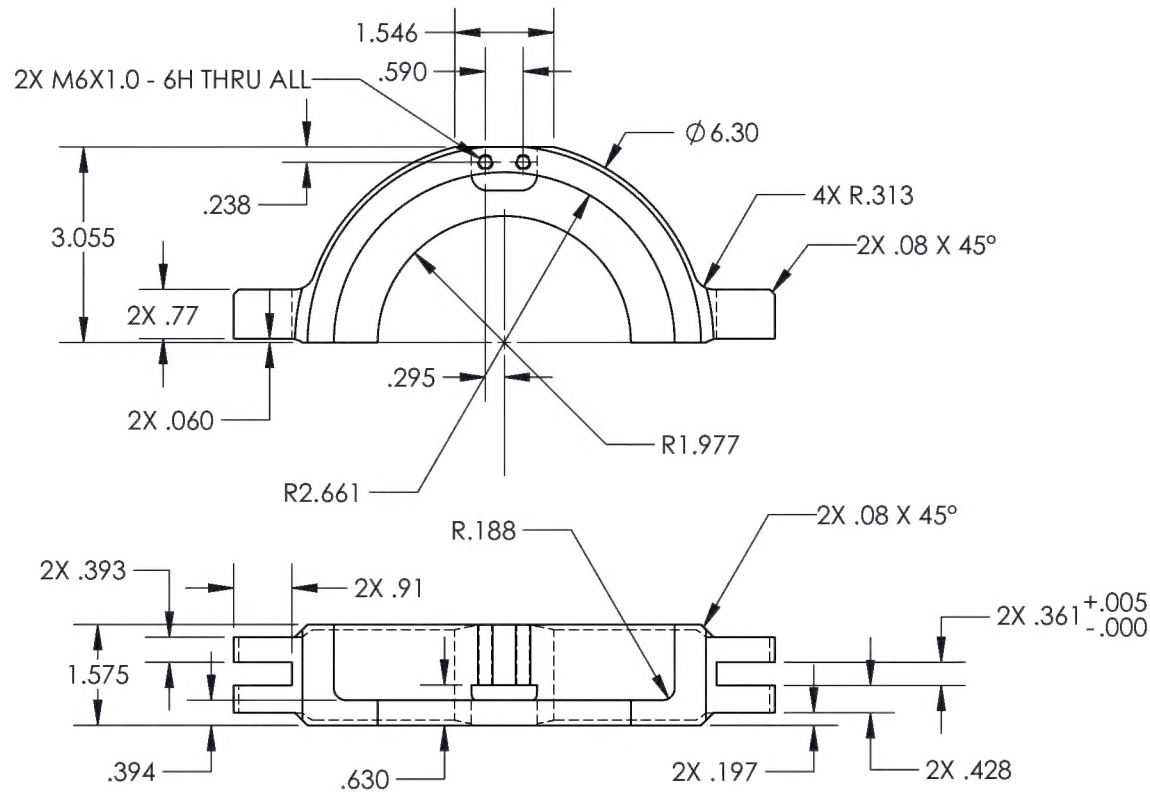
(-1)
BASE

UNDER REVIEW
URF 19-953 19.10.24 (VM)

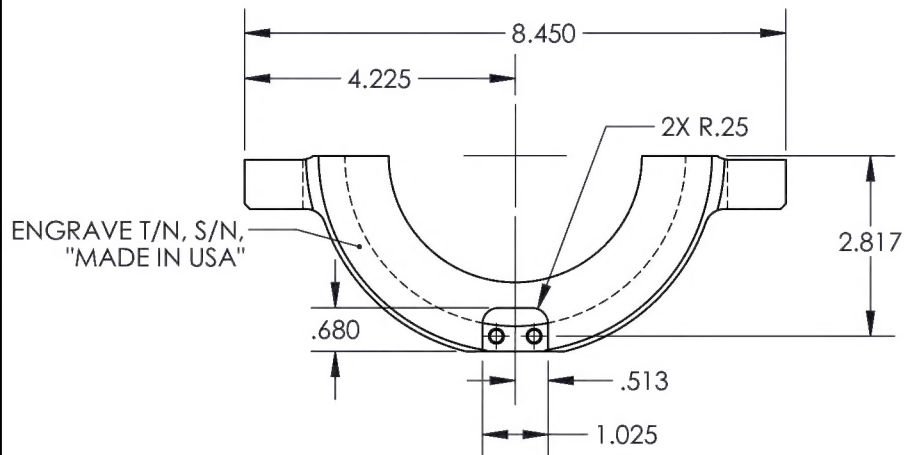
DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE1X53-166-817-1	REV 2
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH BLACK OXIDE	.XX ± .01 ANGLES ± 5°
SPEC QMSI-6.2.2, B.O. REV D	.X ± .1 SURFACES = 125
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EC135
SCALE 1:8	DATE 6/15/2012
SHEET 2 OF 7	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-3 CH'D DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .91, ADDED ENGRAVE NOTE, CH'D MATERIAL WAS 4140 IS 4140/4142, ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D, ADDED HEAT TREAT RC 28-34.	11/14/2016	RJC	SM



UNDER REVIEW
URF 19-953 19.10.24 (VM)



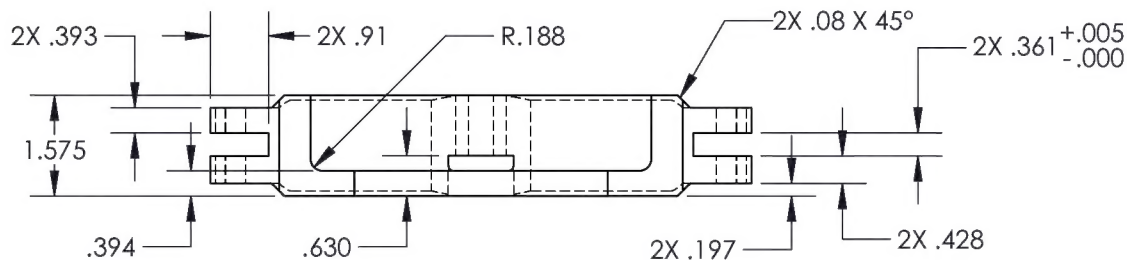
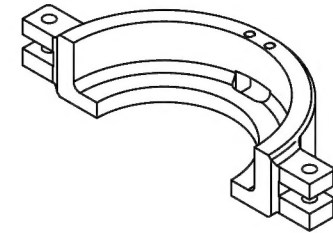
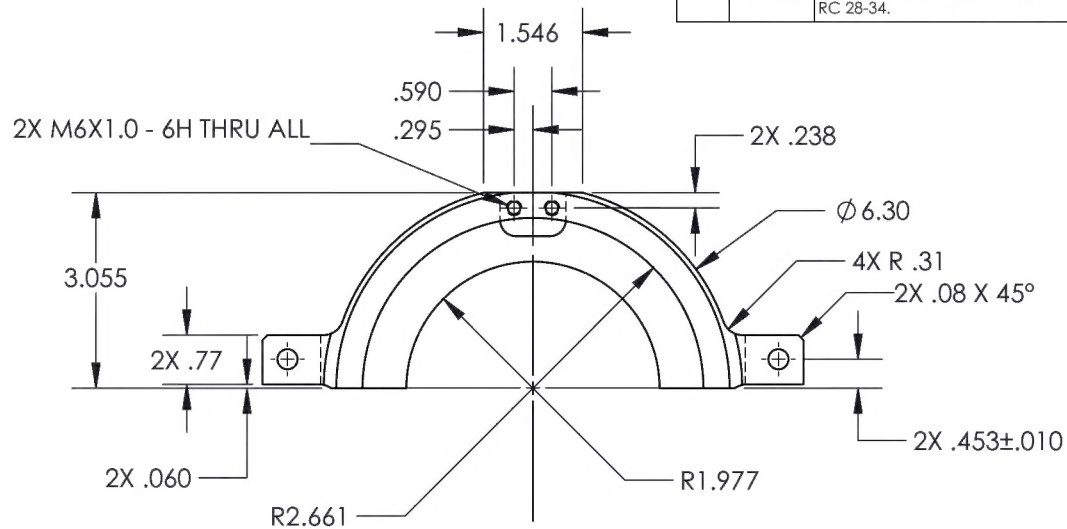
③

RING

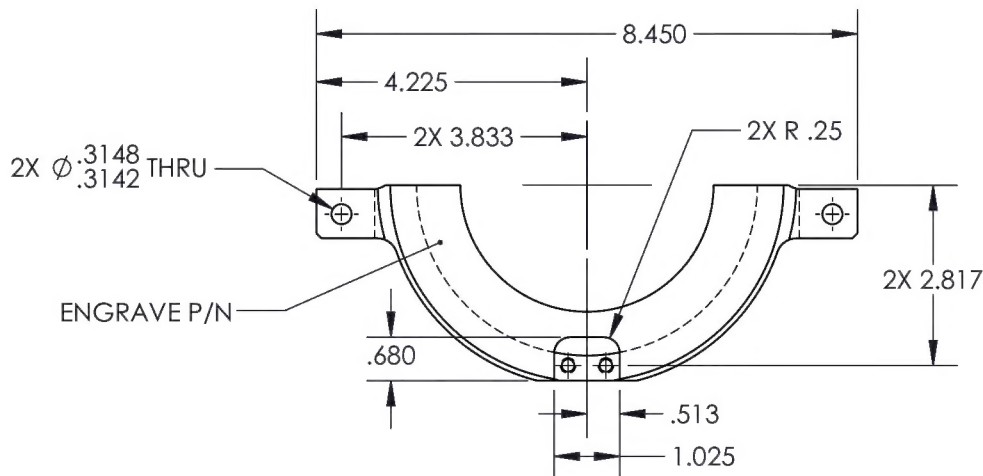
DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE1X53-166-817-3	REV 2
MAT'L 4140/4142 HEAT TREAT RC 28-34 FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: GILBERT	USED ON MODEL
CHECKED: DUERFELDT	EC135
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: MACKOVJAK	
SCALE 1:3	DATE 6/18/2012
SHEET 3 OF 7	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-5 CH'D DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .453 ±.010, 2X .91, ADDED ENGRAVE NOTE, CH'D MATERIAL WAS 4140 IS 4140/4142, ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D, ADDED HEAT TREAT RC 28-34.	11/14/2016	RJC	SM



UNDER REVIEW
URF 19-953 19.10.24 (VM)

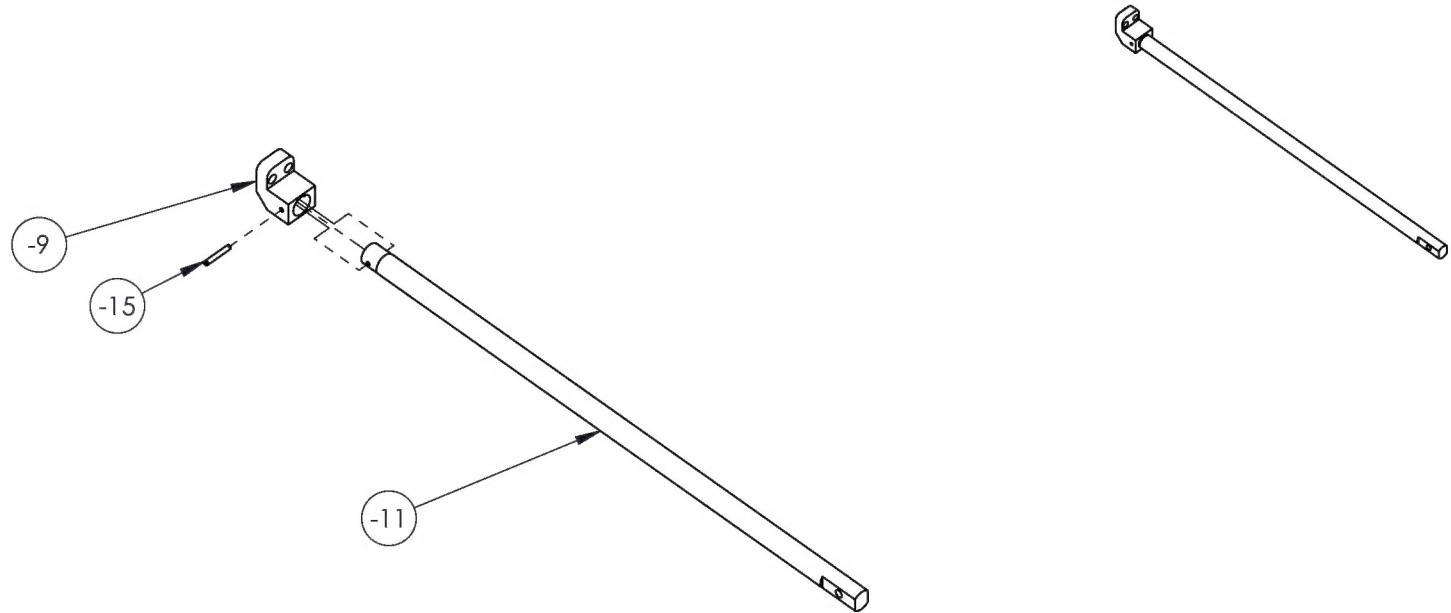


(-5)
RING2

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE1X53-166-817-5	REV 2
MAT'L 4140/4142 HEAT TREAT RC 28-34 FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D DRAWN BY: GILBERT CHECKED: OPPTS APPR: QA APPR: APPROVED: MACKOVJAK SCALE 1:3	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL EC135 DATE 6/18/2012 SHEET 4 OF 7	

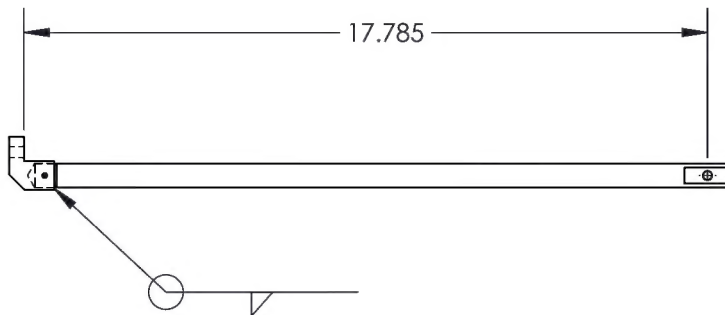
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-7 ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D, CH'D DWG. TO SHEET METAL TOLERANCE.	11/14/2016	RJC	SM



UNDER REVIEW

URF 19-953 19.10.24 (VM)



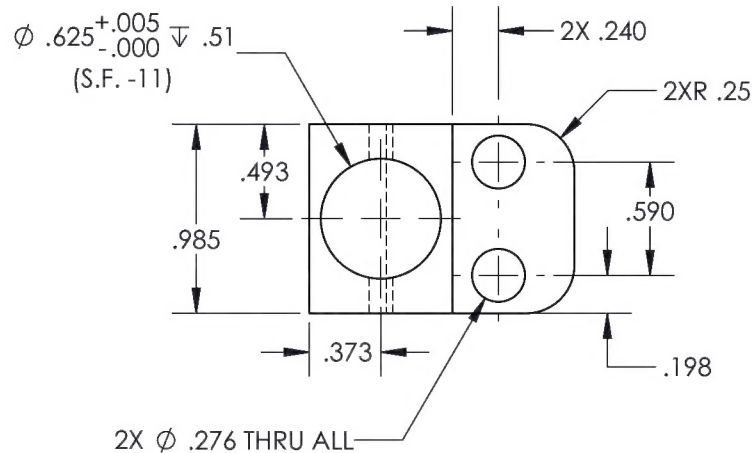
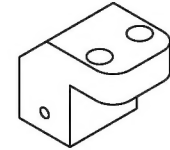
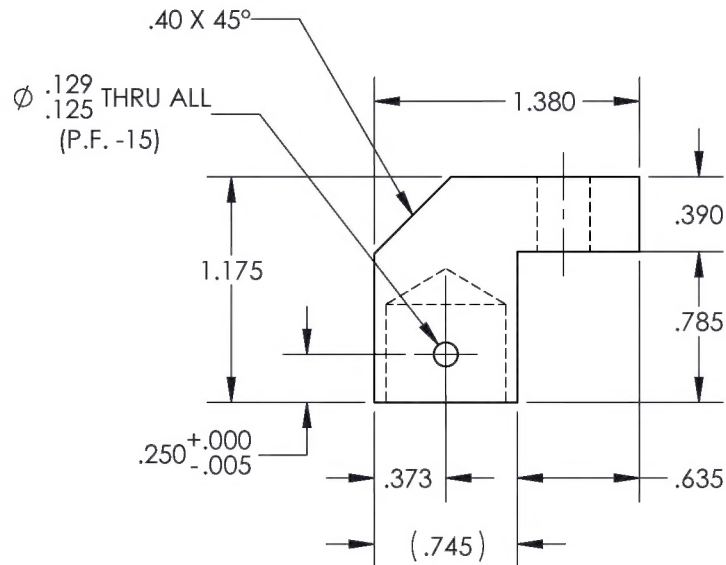
(-7)
WELDMENT

NOTE:
INSERT -15 SPRING PIN THEN WELD.

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE1X53-166-817-7	REV 2
MAT'L TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EC135
SCALE 1:5	DATE 6/18/2012
SHEET 5 OF 7	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-9 CH'D DIM WAS .129/.125 IS Ø.129/.125 (P.F. -15), WAS Ø.625 +.005/.000 ∇ .510 IS Ø.625 +.005/.000 ∇ .51 (S.F. -11), WAS .240 IS 2X .240, DELETED DIM .395, CH'D MATERIAL WAS 1018 IS A36/1018/1020 HR, ADDED FINISH SEE -7.	11/14/2016	RJC	SM



(-9)

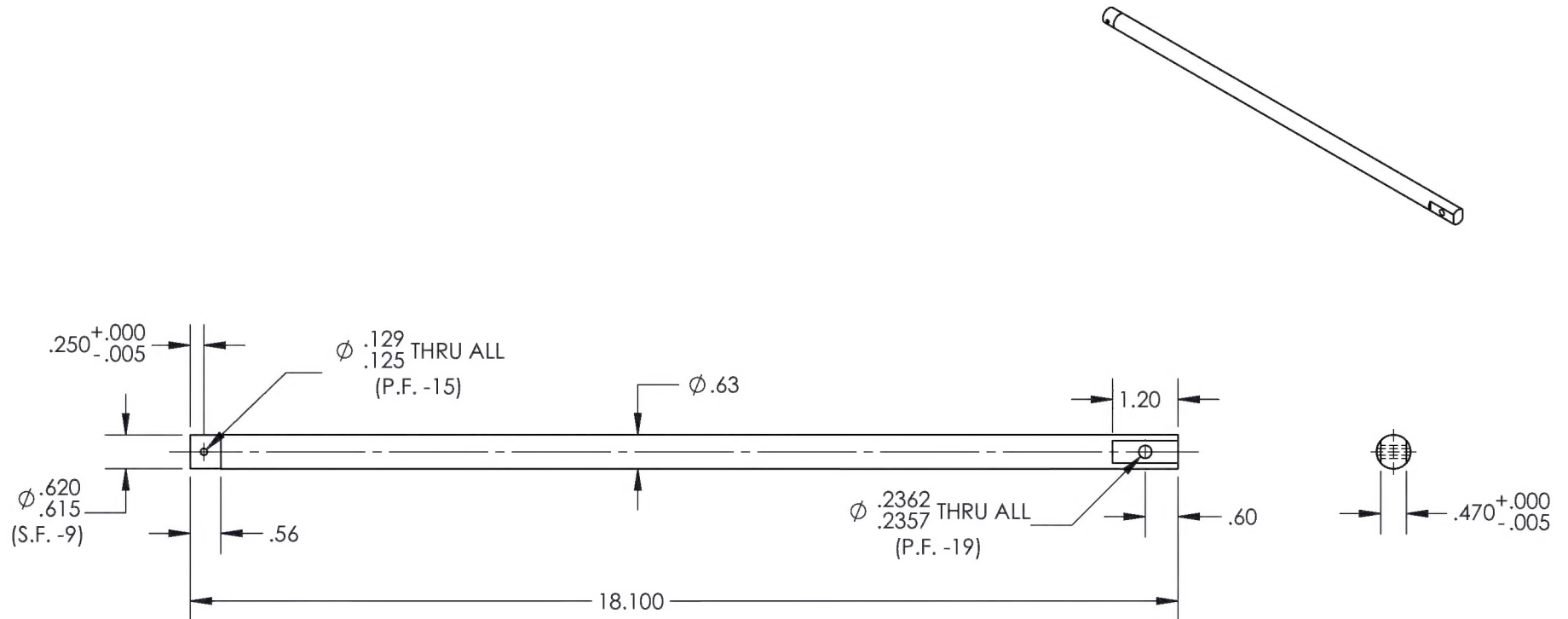
ROD TOP

UNDER REVIEW
URF 19-953 19.10.24 (VM)

DART AEROSPACE	
TITLE PULLER	
DWG NO. RBE1X53-166-817-9	REV 2
MAT'L A36/1018/1020 HR FINISH SEE -7 SPEC DRAWN BY: GILBERT CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: MACKOVJAK	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL EC135	
SCALE 1:1	DATE 6/18/2012
SHEET 6 OF 7	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0220	-11 CH'D DIM WAS Ø(.625) IS Ø.63, WAS 1.200 IS 1.20, WAS .600 IS .60, WAS Ø.2391/.2379 THRU ALL IS Ø.2362/.2357 THRU ALL (P.F. -19). ADDED DIM .56 Ø.620/.615 (S.F. -9), CH'D MATERIAL WAS 1018 IS 1018/1020 CR, ADDED FINISH SEE -7.	11/14/2016	RJC	SM



UNDER REVIEW
URF 19-953 19.10.24 (VM)

(-11)

ROD

DART AEROSPACE	
TITLE: PULLER	
DWG NO. RBE1X53-166-817-11	REV 2
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH SEE -7	.XX ± .01 ANGLES ± .5°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	EC135
SCALE 1:3	DATE 6/15/2012
SHEET 7 OF 7	